

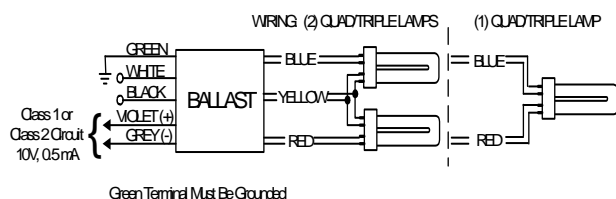
# PHILIPS ADVANCE

## Electrical Specifications

|                           |                           |
|---------------------------|---------------------------|
| <b>IZT-2S26-M5-LD@120</b> |                           |
| Brand Name                | <b>MARK 7 0-10V</b>       |
| Ballast Type              | <b>Electronic Dimming</b> |
| Starting Method           | <b>Programmed Start</b>   |
| Lamp Connection           | <b>Series</b>             |
| Input Voltage             | <b>120-277</b>            |
| Input Frequency           | <b>50/60 HZ</b>           |
| Status                    | <b>Active</b>             |

| Lamp Type     | Num. of Lamps | Rated Lamp Watts | Min. Start Temp (°F/C) | Input Current (Amps) | Input Power (Watts) (min/max) | Ballast Factor (min/max) | MAX THD % | Power Factor | Lamp Current Crest Factor | B.E.F. |
|---------------|---------------|------------------|------------------------|----------------------|-------------------------------|--------------------------|-----------|--------------|---------------------------|--------|
| CFQ13W/G24Q   | 1             | 13               | 50/10                  | 0.15                 | 06/18                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 5.56   |
| CFQ13W/G24Q   | 2             | 13               | 50/10                  | 0.28                 | 19/34                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.94   |
| CFQ18W/G24Q   | 1             | 18               | 50/10                  | 0.19                 | 07/23                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 4.35   |
| CFQ18W/G24Q   | 2             | 18               | 50/10                  | 0.34                 | 11/41                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.44   |
| CFQ26W/G24Q   | 1             | 26               | 50/10                  | 0.25                 | 08/30                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.33   |
| * CFQ26W/G24Q | 2             | 26               | 50/10                  | 0.46                 | 13/55                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 1.82   |
| CFTR13W/GX24Q | 1             | 13               | 50/10                  | 0.15                 | 06/18                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 5.56   |
| CFTR13W/GX24Q | 2             | 13               | 50/10                  | 0.28                 | 19/33                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.03   |
| CFTR18W/GX24Q | 1             | 18               | 50/10                  | 0.19                 | 07/23                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 4.35   |
| CFTR18W/GX24Q | 2             | 18               | 50/10                  | 0.32                 | 11/41                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.44   |
| CFTR26W/GX24Q | 1             | 26               | 50/10                  | 0.25                 | 08/30                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.33   |
| CFTR26W/GX24Q | 2             | 26               | 50/10                  | 0.46                 | 13/55                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 1.82   |
| CFTR32W/GX24Q | 1             | 32               | 50/10                  | 0.30                 | 09/36                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.78   |
| CFTR42W/GX24Q | 1             | 42               | 50/10                  | 0.39                 | 09/47                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.13   |

## Wiring Diagram



Diag 166

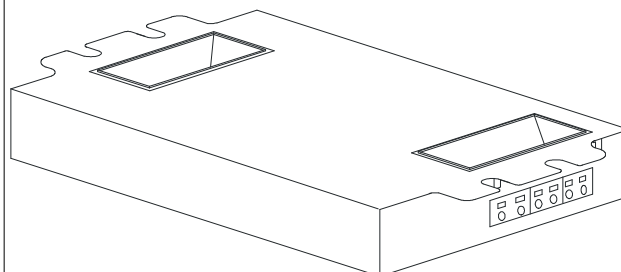
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## Standard Lead Length (inches)

|        | in. | cm. |
|--------|-----|-----|
| Black  | 0   | 0   |
| White  | 0   | 0   |
| Blue   | 0   | 0   |
| Red    | 0   | 0   |
| Yellow | 0   | 0   |
| Gray   |     | 0   |
| Violet |     | 0   |

|              | in. | cm. |
|--------------|-----|-----|
| Yellow/Blue  |     | 0   |
| Blue/White   |     | 0   |
| Brown        |     | 0   |
| Orange       |     | 0   |
| Orange/Black |     | 0   |
| Black/White  |     | 0   |
| Red/White    |     | 0   |

## Enclosure



## Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 4.98 "      | 3.00 "    | 1.18 "     | 4.60 "       |
| 4 49/50     | 3         | 1 9/50     | 4 3/5        |
| 12.6 cm     | 7.6 cm    | 3 cm       | 11.7 cm      |



Revised 10/23/07

Data is based upon tests performed by Philips Lighting N.A in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

## Philips Lighting Electronic N.A

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Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

# PHILIPS ADVANCE

| IZT-2S26-M5-LD@120 |                    |
|--------------------|--------------------|
| Brand Name         | MARK 7 0-10V       |
| Ballast Type       | Electronic Dimming |
| Starting Method    | Programmed Start   |
| Lamp Connection    | Series             |
| Input Voltage      | 120-277            |
| Input Frequency    | 50/60 HZ           |
| Status             | Active             |

## Electrical Specifications

### Notes:

#### Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be available in a plastic/metal can or all metal can construction to meet all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

#### Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start.
- 2.2 VZT-4PSP32-G ballast shall provide Independent Lamp Operation (ILO) allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.
- 2.4 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.5 Ballast shall operate from 50/60 Hz input source of 120V or 277V or 347V with sustained variations of +/- 10% (voltage and frequency). IntelliVolt models shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.6 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.7 Ballast shall have a Power Factor greater than 0.98 at full light output and greater than 0.90 throughout the dimming range for primary lamp.
- 2.8 Ballast shall have a minimum ballast factor of 1.00 (120V and 277V 1-3 lamp models) or 0.88 (120V and 277V 4 lamp models and 347V 2-3 lamp models) or 1.18 (277V 4 lamp HL models) at maximum light output and 0.03 at minimum light output for primary lamp.
- 2.9 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.10 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage and 100% power.
- 2.11 Ballast shall have a Class A sound rating.
- 2.12 Ballast shall have a minimum starting temperature of 10C (50F) for primary lamp.
- 2.13 Ballast shall provide Lamp EOL Protection Circuit for all T5, T5/HO and CFL lamps.
- 2.14 Ballast shall control lamp light output from 100% - 3% relative light output for series operation T8 and CFL lamps, 100% - 10% relative light output for parallel operation T8 and 100% - 1% relative light output for T5/HO lamps.
- 2.15 Ballast shall ignite the lamps at any light output setting without first going to another output setting.
- 2.16 Ballast shall tolerate sustained open circuit and short circuit output conditions.

#### Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.

#### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Ballast shall be controlled by a Class 1 or Class 2 low voltage 0-10VDC controller.

4.5 Ballast shall be Philips Advance part # \_\_\_\_\_ or approved equal.



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# PHILIPS ADVANCE

## Electrical Specifications

|                           |                           |
|---------------------------|---------------------------|
| <b>IZT-2S26-M5-LD@277</b> |                           |
| Brand Name                | <b>MARK 7 0-10V</b>       |
| Ballast Type              | <b>Electronic Dimming</b> |
| Starting Method           | <b>Programmed Start</b>   |
| Lamp Connection           | <b>Series</b>             |
| Input Voltage             | <b>120-277</b>            |
| Input Frequency           | <b>50/60 HZ</b>           |
| Status                    | <b>Active</b>             |

| Lamp Type     | Num. of Lamps | Rated Lamp Watts | Min. Start Temp (°F/C) | Input Current (Amps) | Input Power (Watts) (min/max) | Ballast Factor (min/max) | MAX THD % | Power Factor | Lamp Current Crest Factor | B.E.F. |
|---------------|---------------|------------------|------------------------|----------------------|-------------------------------|--------------------------|-----------|--------------|---------------------------|--------|
| CFQ13W/G24Q   | 1             | 13               | 50/10                  | 0.07                 | 06/18                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 5.56   |
| CFQ13W/G24Q   | 2             | 13               | 50/10                  | 0.12                 | 09/33                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.03   |
| CFQ18W/G24Q   | 1             | 18               | 50/10                  | 0.09                 | 07/23                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 4.35   |
| CFQ18W/G24Q   | 2             | 18               | 50/10                  | 0.15                 | 10/41                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.44   |
| * CFQ26W/G24Q | 1             | 26               | 50/10                  | 0.11                 | 08/30                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.33   |
| CFQ26W/G24Q   | 2             | 26               | 50/10                  | 0.20                 | 13/55                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 1.82   |
| CFTR13W/GX24Q | 1             | 13               | 50/10                  | 0.07                 | 06/18                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 5.56   |
| CFTR13W/GX24Q | 2             | 13               | 50/10                  | 0.12                 | 09/32                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.13   |
| CFTR18W/GX24Q | 1             | 18               | 50/10                  | 0.08                 | 07/20                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 5.00   |
| CFTR18W/GX24Q | 2             | 18               | 50/10                  | 0.15                 | 10/41                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.44   |
| CFTR26W/GX24Q | 1             | 26               | 50/10                  | 0.11                 | 08/30                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 3.33   |
| CFTR26W/GX24Q | 2             | 26               | 50/10                  | 0.20                 | 13/55                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 1.82   |
| CFTR32W/GX24Q | 1             | 32               | 50/10                  | 0.13                 | 09/36                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.78   |
| CFTR42W/GX24Q | 1             | 42               | 50/10                  | 0.17                 | 09/47                         | 0.03/1.00                | 10        | 0.99         | 1.6                       | 2.13   |

## Wiring Diagram

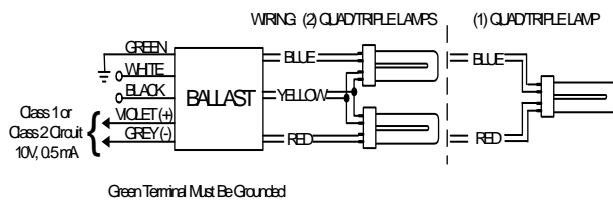


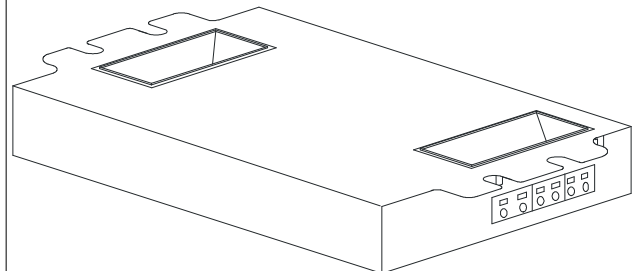
Diagram 166

The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## Standard Lead Length (inches)

|        | in. | cm. |              | in. | cm. |
|--------|-----|-----|--------------|-----|-----|
| Black  | 0   | 0   | Yellow/Blue  |     | 0   |
| White  | 0   | 0   | Blue/White   |     | 0   |
| Blue   | 0   | 0   | Brown        |     | 0   |
| Red    | 0   | 0   | Orange       |     | 0   |
| Yellow | 0   | 0   | Orange/Black |     | 0   |
| Gray   |     | 0   | Black/White  |     | 0   |
| Violet |     | 0   | Red/White    |     | 0   |

## Enclosure



## Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 4.98 "      | 3.00 "    | 1.18 "     | 4.60 "       |
| 4 49/50     | 3         | 1 9/50     | 4 3/5        |
| 12.6 cm     | 7.6 cm    | 3 cm       | 11.7 cm      |



Revised 03/18/13

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# PHILIPS ADVANCE

## IZT-2S26-M5-LD@277

|                 |                    |
|-----------------|--------------------|
| Brand Name      | MARK 7 0-10V       |
| Ballast Type    | Electronic Dimming |
| Starting Method | Programmed Start   |
| Lamp Connection | Series             |
| Input Voltage   | 120-277            |
| Input Frequency | 50/60 HZ           |
| Status          | Active             |

### Electrical Specifications

#### Notes:

#### Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be available in a plastic/metal can or all metal can construction to meet all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

#### Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start.
- 2.2 VZT-4PSP32-G ballast shall provide Independent Lamp Operation (ILO) allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.
- 2.4 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.5 Ballast shall operate from 50/60 Hz input source of 120V or 277V or 347V with sustained variations of +/- 10% (voltage and frequency). IntelliVolt models shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.6 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.7 Ballast shall have a Power Factor greater than 0.98 at full light output and greater than 0.90 throughout the dimming range for primary lamp.
- 2.8 Ballast shall have a minimum ballast factor of 1.00 (120V and 277V 1-3 lamp models) or 0.88 (120V and 277V 4 lamp models and 347V 2-3 lamp models) or 1.18 (277V 4 lamp HL models) at maximum light output and 0.03 at minimum light output for primary lamp.
- 2.9 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.10 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage and 100% power.
- 2.11 Ballast shall have a Class A sound rating.
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- 2.13 Ballast shall provide Lamp EOL Protection Circuit for all T5, T5/HO and CFL lamps.
- 2.14 Ballast shall control lamp light output from 100% - 3% relative light output for series operation T8 and CFL lamps, 100% - 10% relative light output for parallel operation T8 and 100% - 1% relative light output for T5/HO lamps.
- 2.15 Ballast shall ignite the lamps at any light output setting without first going to another output setting.
- 2.16 Ballast shall tolerate sustained open circuit and short circuit output conditions.

#### Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.

#### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
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- 4.4 Ballast shall be controlled by a Class 1 or Class 2 low voltage 0-10VDC controller.

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